

Montana Department of Natural Resources and Conservation
Water Resources Division
Water Rights Bureau

ENVIRONMENTAL ASSESSMENT
For Routine Actions with Limited Environmental Impact

Part I. Proposed Action Description

1. **Applicants/Contact names and addresses:**

Sand Wedge LLC
PO Box 1153
Lakeside, MT 59922

2. **Type of action:** Surface Water Application for Beneficial Water Use Permit 76LJ 30149316

3. **Water source name:** Flathead River (Flathead Lake)

4. **Location affected by project:** Government Lot 4, SWSWSE Section 7, Township 26N, Range 20W, Flathead County, Montana.

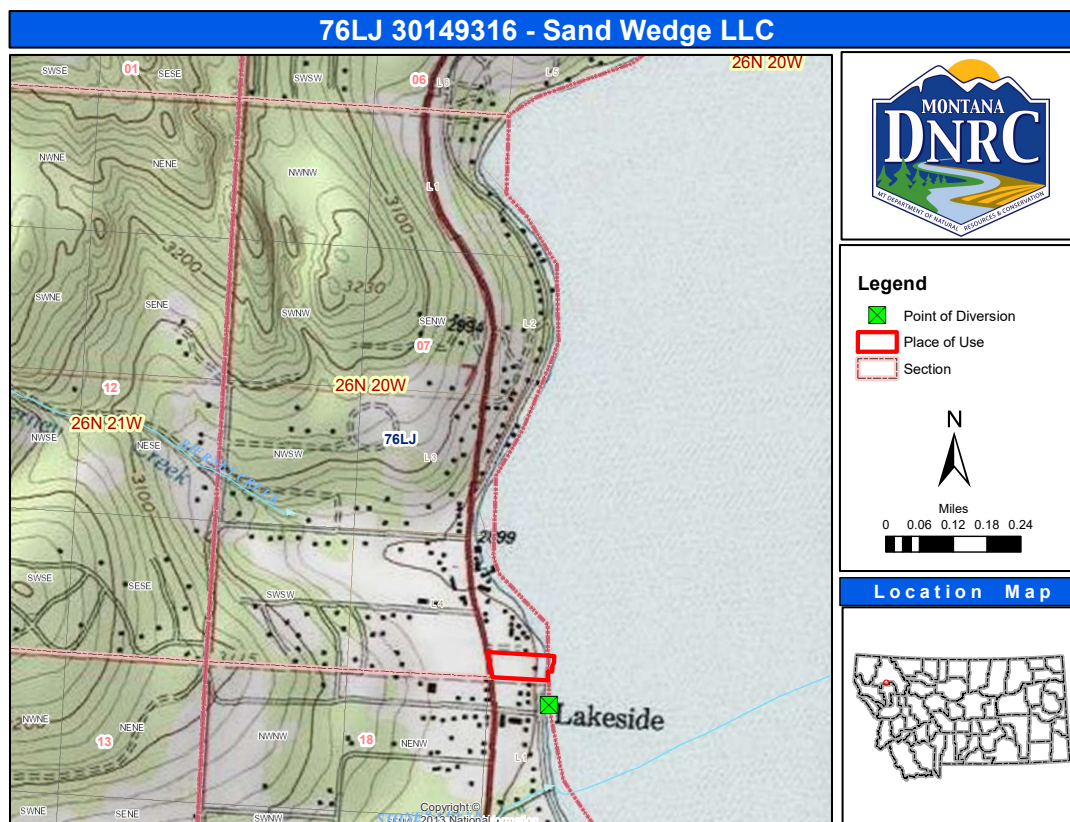


Figure 1. Map of the proposed place of use and point of diversion.

5. Narrative summary of the proposed project, purpose, action to be taken, and benefits:

The Applicant proposes to divert water from the Flathead River (Flathead Lake), by means of a pump, at a rate of 27.0 GPM up to an annual volume of 4.06 AF for irrigation of 1.92 acres of park landscaping from April 15 – October 15. The point of diversion (POD) is located in the Lacon Subdivision Lot D, Government Lot 1, NWNWNE Section 18, Township 26N, Range 20W, Flathead County, Montana. The place of use is located in Government Lot 4, SWSWSE Section 7, Township 26N, Range 20W, Flathead County, Montana (Figure 1). The point of diversion is in the Upper Flathead River Basin (76LJ), in an area that is not subject to water right basin closures or controlled groundwater area restrictions.

The proposed water use permit is to supply park landscaping irrigation water to the Phase III expansion of Volunteer Park in Lakeside, Flathead County, MT. Upon completion of the expansion, Applicant intends to donate the land to Flathead County. The proposed permit will utilize the same point of diversion and primary water conveyance and distribution infrastructure as the two existing water rights that supply water to the Phase I and II areas of Volunteer Park (76LJ 30046775 and 76LJ 30069798, respectively). The proposed Phase III system is designed to only supply water to the irrigated areas associated with Phase III, with all phases designed to operate independently of each other at separate times.

The DNRC shall issue a water use permit if the applicant proves the criteria in 85-2-311 MCA are met.

6. Agencies consulted during preparation of the Environmental Assessment:

- U.S. Fish and Wildlife Service (USFWS): National Wetlands Inventory Wetlands Mapper
- Montana Natural Heritage Program: Endangered, Threatened Species, and Species of Special Concern
- Montana Department of Fish Wildlife & Parks (DFWP): Dewatered Stream Information
- Montana Department of Environmental Quality (MDEQ): Clean Water Act Information Center
- U.S. Natural Resources Conservation Service (NRCS): Web Soil Survey

Part II. Environmental Review

1. Environmental Impact Checklist:

PHYSICAL ENVIRONMENT

WATER QUANTITY, QUALITY AND DISTRIBUTION

Water quantity - Assess whether the source of supply is identified as a chronically or periodically dewatered stream by DFWP. Assess whether the proposed use will worsen the already dewatered condition.

The Applicant plans to divert water from Flathead Lake, which is not on the DFWP list of chronically or periodically dewatered streams.

Determination: No significant impact.

Water quality - *Assess whether the stream is listed as water quality impaired or threatened by DEQ, and whether the proposed project will affect water quality.*

According to the MDEQ Clean Water Act Information Center's 2020 Water Quality Information, Flathead Lake is listed as "Not Fully Supporting" for aquatic life due to Mercury (no TMDL completed), Total Nitrogen (TMDL completed), Total Phosphorus (TMDL completed), and Polychlorinated Biphenyls (no TMDL completed). Flathead Lake is listed as "Fully Supporting" for Drinking Water, Primary Contact Recreation, and Agricultural uses. Flathead Lake's Water Quality Category is "5," meaning one or more applicable beneficial uses are impaired or threatened, and a TMDL is required to address the factors causing the impairment or threat.

Determination: No significant impact.

Groundwater - *Assess if the proposed project impacts ground water quality or supply. If this is a groundwater appropriation, assess if it could impact adjacent surface water flows.*

Determination: N/A, this project diverts from a surface water source.

DIVERSION WORKS - *Assess whether the means of diversion, construction and operation of the appropriation works of the proposed project will impact any of the following: channel impacts, flow modifications, barriers, riparian areas, dams, well construction.*

The Applicant proposes to divert water from the Flathead River (Flathead Lake) at a maximum rate of 27.0 GPM while maintaining an operating pressure of 45 pounds per square inch (psi) via a Goulds HSC20 multi-stage centrifugal pump with an AO Smith three-phase 2.0-horsepower motor, and a variable frequency drive (VFD) paired with a pressure tank. This system is already in place and supplies water to Phases I and II of Volunteer Park under provisional permits 76LJ 30046775 and 76LJ 30069798. The system has a Hunter Industries FCT-200 impeller meter installed and is cable of recording the flow and volume utilized if ever needed. At any given time, water will be diverted to only one of the three phases and the flow rate will not exceed 27.0 GPM when being diverted for Phase III based upon the system design specifications and irrigation schedule.

The pump intake is installed within a protective six-inch perforated pipe housing from which a three-inch intake line extends 235-feet to the pump vault containing the pump, pressure tank, and VFD controls. The VFD and the pressure tank ensure the system operates at a constant 45-psi when delivering water to the Phase III irrigation zones. Water is conveyed from the vault to the various distribution valve boxes via 1.5 and 2.0-inch PVC main lines. Since this diversion and conveyance system is already servicing Phases I and II of the park, water service to the Phase III area required that the existing mainline servicing the Phase II area be extended to serve the additional areas associated with Phase III. The irrigation system for all phases was designed by professional landscape architects at Bruce Boody Landscape Architect, Inc.

The Phase III area irrigation system for Volunteer Park consists of 21 irrigation zones which are comprised of combinations of 58 Hunter MP1000, 58 Hunter MP2000, 114 Hunter MP3000, 14 Hunter MP3500, and four (4) Hunter MP800SR sprinkler heads, as well as Hunter HE-B drip emitters. The zones each have their own Hunter or Rain Bird control valve. The flow rates required for the 21 irrigation zones range from 5.24 to 27.22 GPM per zone. The service pressure at the sprinklers is calculated to range from 34.37 to 38.87 psi. The requested flow rate of 27.0 GPM for this permit is based on the flow requirement for the largest rotator-sprinkler irrigation zone.

The diversion will be operated as required to meet irrigation demands of the Phase III areas throughout the irrigation season. Water will not be diverted to more than one phase at any given time.

This project will not create any channel impacts, flow modifications, barriers, dams, or riparian impacts to Flathead Lake, nor will it affect any wells.

Determination: No significant impact.

UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES

Endangered and threatened species - *Assess whether the proposed project will impact any threatened or endangered fish, wildlife, plants or aquatic species or any "species of special concern," or create a barrier to the migration or movement of fish or wildlife. For groundwater, assess whether the proposed project, including impacts on adjacent surface flows, would impact any threatened or endangered species or "species of special concern."*

The Montana Natural Heritage Program website was reviewed to determine if there are any threatened or endangered fish, wildlife, plants, aquatic species, or any "species of special concern" in Township 26N, Range 20W that could be impacted by the proposed project. 14 animal and three plant species of concern (Tables 1 and 2, respectively) were identified within the township and range where the project is located. Of these species, the Grizzly Bear (*Ursus arctos*) and the Bull Trout (*Salvelinus confluentus*) are listed as threatened by the USFWS. An adequate quantity of water will still exist in the surface water source to maintain existing populations of Bull Trout, should they exist there currently. This area is already highly developed, and it is not anticipated that any species of concern will be further impacted by the proposed project.

Table 1. Animal Species of Concern				
Fisher (<i>Pekania pennanti</i>)	Brown Creeper (<i>Certhia americana</i>)	Cassin's Finch (<i>Haemorhous cassinii</i>)	Northern Alligator Lizard (<i>Elgaria coerulea</i>)	Bull Trout (<i>Salvelinus confluentus</i>)
Grizzly Bear (<i>Ursus arctos</i>)	Evening Grosbeak (<i>Coccothraustes vespertinus</i>)	Common Tern (<i>Sterna hirundo</i>)	Western Skink (<i>Plestiodon skiltonianus</i>)	Pygmy Whitefish (<i>Prosopium coulteri</i>)
Little Brown Myotis (<i>Myotis lucifugus</i>)	Great Blue Heron (<i>Ardea herodias</i>)	Pileated Woodpecker (<i>Dryocopus pileatus</i>)	Westslope Cutthroat Trout (<i>Oncorhynchus clarkii lewisi</i>)	

Table 2. Plant Species of Concern		
Howell's Quillwort (<i>Isoetes howellii</i>)	Many-headed Sedge (<i>Carex sychnocephala</i>)	Panic Grass (<i>Dichanthelium acuminatum</i>)

Determination: No significant impact.

Wetlands - Consult and assess whether the apparent wetland is a functional wetland (according to COE definitions), and whether the wetland resource would be impacted.

Determination: N/A, project does not involve wetlands or critical riparian habitats.

Ponds - For ponds, consult and assess whether existing wildlife, waterfowl, or fisheries resources would be impacted.

Determination: N/A, project does not involve ponds.

GEOLOGY/SOIL QUALITY, STABILITY AND MOISTURE - Assess whether there will be degradation of soil quality, alteration of soil stability, or moisture content. Assess whether the soils are heavy in salts that could cause saline seep.

It is not anticipated that the proposed irrigation of approximately 1.92 acres of park landscaping will have a negative impact on the soil quality, stability, or moisture content. The soil in the project area is Kila ashy silt loam, 0 to 8 percent slopes, formed from alluvium and/or outwash over till parent material. Kila ashy silt loam has moderately high to high capacity to transmit water. Soils in this area are not likely susceptible to saline seep.

Determination: No significant impact.

VEGETATION COVER, QUANTITY AND QUALITY/NOXIOUS WEEDS - *Assess impacts to existing vegetative cover. Assess whether the proposed project would result in the establishment or spread of noxious weeds.*

This area is highly developed, and this new phase of Volunteer Park is a re-development of previously developed land and thus any existing native vegetation had already been disturbed. It is not anticipated that issuance of a water use permit will contribute to the establishment or spread of noxious weeds in the project area. Noxious weed prevention and control will be the responsibility of the landowners, who must follow local noxious weed regulations.

Determination: No significant impact.

AIR QUALITY - *Assess whether there will be a deterioration of air quality or adverse effects on vegetation due to increased air pollutants.*

There will be no impact to air quality associated with issuance of the proposed permit for beneficial use of surface water.

Determination: No significant impact.

HISTORICAL AND ARCHEOLOGICAL SITES - *Assess whether there will be degradation of unique archeological or historical sites in the vicinity of the proposed project if it is on State or Federal Lands. If it is not on State or Federal Lands simply state NA-project not located on State or Federal Lands.*

Determination: N/A, project not located on State or Federal Lands.

DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AND ENERGY - *Assess any other impacts on environmental resources of land, water, and energy not already addressed.*

All impacts to land, water, and energy have been identified and no further impacts are anticipated.

Determination: No significant impact.

<h2>HUMAN ENVIRONMENT</h2>

LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS - *Assess whether the proposed project is inconsistent with any locally adopted environmental plans and goals.*

The project is consistent with planned land uses.

Determination: No significant impact.

ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES - *Assess whether the proposed project will impact access to or the quality of recreational and wilderness activities.*

The proposed project will not inhibit, alter, or impair access to present recreational opportunities in the area. The project is not expected to create any significant pollution, noise, or traffic congestion in the area that may alter the quality of recreational opportunities. The proposed place of use and diversion do not exist on land designated as wilderness. The proposed project will enhance recreational opportunities, since the project is an expansion of a public park.

Determination: No significant impact.

HUMAN HEALTH - *Assess whether the proposed project impacts human health.*

No negative impact on human health is anticipated from this proposed use.

Determination: No significant impact.

PRIVATE PROPERTY - *Assess whether there are any government regulatory impacts on private property rights.*

Yes___ No X If yes, analyze any alternatives considered that could reduce, minimize, or eliminate the regulation of private property rights.

Determination: No impact.

OTHER HUMAN ENVIRONMENTAL ISSUES - *For routine actions of limited environmental impact, the following may be addressed in a checklist fashion.*

Impacts on:

- (a) Cultural uniqueness and diversity? None identified.
- (b) Local and state tax base and tax revenues? None identified.
- (c) Existing land uses? None identified.
- (d) Quantity and distribution of employment? None identified.
- (e) Distribution and density of population and housing? None identified.
- (f) Demands for government services? None identified.
- (g) Industrial and commercial activity? None identified.
- (h) Utilities? None identified.
- (i) Transportation? None identified.
- (j) Safety? None identified.

(k) Other appropriate social and economic circumstances? None identified.

2. *Secondary and cumulative impacts on the physical environment and human population:*

Secondary Impacts: None identified.

Cumulative Impacts: None identified.

3. *Describe any mitigation/stipulation measures:*

None.

4. *Description and analysis of reasonable alternatives to the proposed action, including the no action alternative, if an alternative is reasonably available and prudent to consider:*

The only alternative to the proposed action would be the no action alternative. The no action alternative would not authorize the diversion of water from Flathead Lake.

Part III. Conclusion

1. *Preferred Alternative*

Issue a water use permit if the Applicants prove the criteria in 85-2-311 MCA are met.

2. *Comments and Responses*

None.

3. *Finding:*

Yes ___ No X Based on the significance criteria evaluated in this EA, is an EIS required?

If an EIS is not required, explain why the EA is the appropriate level of analysis for this proposed action:

No significant impacts related to the proposed project have been identified.

Name of person(s) responsible for preparation of EA:

Name: Travis Wilson

Title: Water Resource Specialist

Date: November 9, 2020